REMARKS

Claims 1-23 are now pending in the present application. Claims 1-10 are withdrawn. Additionally, Claims 11 and 20-22 have been amended and no claims have been added.

The abstract has been amended to reduce the word count to less than 150 and the specification has been amended to omit numeral 438, which was not depicted in the drawings.

Applicant has carefully studied the outstanding Office Action. The present Response is intended to be fully responsive to all points of rejection raised by the Examiner and is believed to place the application in condition for allowance. Favorable reconsideration and allowance of this application is respectfully requested. No new matter has been added by any of the amendments to the specification. Applicant respectfully requests reconsideration and withdrawal of the Examiner's rejections in view of the foregoing amendments and following remarks.

CLAIM OBJECTIONS – 37 C.F.R. § 1.75(c)

Claim 12

The Examiner has objected to claim 12 under 37 C.F.R. § 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. In particular, the Examiner stated:

Claim 12 requires the molding of both the cap and the container; yet this is clearly stated in the preamble of claim 11, making claim 12 an improper dependant claim.

The Federal Circuit has held that the preamble of a claim does not limit the scope of the claim when it merely states an intended use or purpose of the invention. *Metabolite Laboratories, Inc. v. Laboratory Corporation Of America Holdings (d/b/a LabCorp)*, 370 F.3d 1354 (Fed. Cir. 2004). If the preamble gives "life and meaning" to the invention, however, then its limitations do limit the scope of the claim. *Loctite Corp. v. Ultraseal Ltd.*, 781 F. 2d 861, 866, 228 U.S.P.Q. 90, 92 (Fed. Cir. 1995). Whether a preamble is limiting turns on its function either as identifying intended use or purpose, or as a true structural limitation that "breathes life" into the claim. See, e.g., *SanDisk Corp. v. Memorex Products, Inc.*, 415 F.3d 1278, 1284, n. 2 (Fed. Cir. 2005).

Applicants believe the preamble in claim 11 merely states an intended purpose and claim 12 is used as a structural modification. Applicants respectfully decline the Examiner's invitation to limit the invention to molded containers.

In light of the above, applicants respectfully request Examiner withdraw the objection as to claim 12.

Claims 21 and 22

The Examiner has objected to claims 21 and 22 under 37 C.F.R. § 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. In particular, the Examiner stated:

Claims 21 and 22 are exact duplicates of claims 13 and 14 and all depend on claim 11.

Claims 21 and 22 have been amended to depend upon claim 20, as was originally intended. Applicants thank Examiner for pointing out this error so that proper correction could be made. In light of amendments, applicants respectfully request the Examiner to withdraw the objection as to claims 21 and 22.

CLAIM REJECTIONS – 35 U.S.C. § 112, Second Paragraph

Claims 11-23

The Examiner has rejected claims 11-23 under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicant regards as the invention. In particular, the Examiner stated:

Claims 11 and 22 [sic] both state the limitation of $T_{CAP} > T_{CNTR}$. However, in the specification, and previously mentioned in the claims ("where the overcap has a smaller amount of tolerance in the molding process than does the container"). T_{CAP} is clearly defined to be smaller in length than T_{CNTR} . The limitation defined in the specification contradicts the limitation provided in the claims.

The Examiner is thanked for pointing out this inconsistency which was made through an inadvertent error. Claims 11 and 20 have been amended to be consistent with the disclosure. In light of this amendment, applicants respectfully request the Examiner to withdraw the rejection.

CLAIM REJECTIONS – 35 U.S.C. § 102(b)

Claims 11-12, 15, 18 and 19

The Examiner has rejected claims 11-12, 15, 18 and 19 under 35 U.S.C. § 102(b) as being anticipated by Crisci (U.S. Patent No. 4,209,107). In particular, the Examiner stated:

Concerning claim 11, Crisci discloses: A method of providing a close fit (column 3 lines 16-20) between a molded container (column 3 lines 61-62) and a molded overcap (column 2 lines 65-68), the method comprising the steps of: designing a container (figure 1, 10), such that said container has an opening surrounded by a rim (figures 3 and 4, top end of 18), said rim having an upper portion that is rounded (60) and a lower portion that is flat in cross-section (30), wherein said container is designed to have a nominal outer diameter at a largest circumference of said rim with a manufacturing tolerance; designing a snap-on overcap (figures 4 and 5, 14) to removably snap over said rim of said container, wherein a base of said overcap is sized to cover said opening (column 1 lines 11-16), said overcap further comprising a flange extending essentially perpendicularly from said base (figures 2 and 4, 44), an inner surface of said flange containing a circumferential ridge having a peak (tip of 42), a flattened face (42) of said ridge being configured to seat against said lower portion of said rim of said container (figure 4, 34A), said overcap having a manufacturing tolerance.

A prior art reference anticipates the claimed invention under 35 U.S.C. § 102 only if every element of a claimed invention is identically shown in that single reference, arranged as they are in the claims. *In re Bond*, 910 F.2d 831, 832, 15 U.S.P.Q.2d 1566, 1567 (Fed. Cir. 1990). All limitations of the claimed invention must be considered when determining patentability. *In re Lowry*, 32 F.3d 1579, 1582, 32 U.S.P.Q.2d 1031, 1034 (Fed. Cir. 1994).

Claim 11 has been amended to convey the intent of the claimed invention. Specifically, the claim was amended to include the limitation that only the flattened face of the flange seats against the lower portion of the container rim. Support for this limitation can be found in paragraph 11 of Published Patent Application No. 2005/0082304, where it states, "Interferences between the container and cap at points other than the intended flat surfaces can cause the closure to become point-to-point, rather than the desired surface-to-surface, so other portions of the inside of the cap are designed not to touch the container, preventing interferences." Crisci, on the other hand, discloses a lid that "has an inverted U-shaped groove which fits over the upper portion of the container body and co-acts therewith to form a four contact vapor locked seal." (Crisci, Col. 2, lns. 1-4). In light of this difference, applicants respectfully request that the Examiner withdraw the rejection.

Further, claim 11 has the required limitation of an "overcap having a manufacturing tolerance of T_{CAP} , wherein $T_{CAP} < T_{CNTR}$." For example, blow molded articles typically cannot be made as accurately as injection molded articles. As indicated in the specification, "it is difficult to produce an injection molded snap-on cap to fit the variations that can be produced by blow molding a container." (See 2005/0082304 at $\P 8$). Crisci, on the other hand, discloses that the "present invention container 10 is particularly adapted for manufacture by injection molding techniques." (Crisci, col. 3, lns. 61-63). Injection molding is more expensive than blow molding. Examiner, in paragraph 15 of the office action mailed on December 30, 2005 freely admits such limitation is not disclosed by Crisci. Examiner states that, "Crisci discloses all the claimed information as stated above, yet fails to describe how to determine tolerance . . . of the cap." Consequently, applicants respectfully request the Examiner to withdraw the rejection as to claims 11-12, 15, 18 and 19.

Claims 12, 18 and 19

The Examiner stated:

In regards to claims 12, 18 and 19, Crisci discloses molding both the container (column 3 lines 16-20) and the overcap (column 2 lines 65-68). Furthermore, crisci also discloses molding the overcap of low-density polyethylene (column 3 lines 28-30) and the container to be made of high-density polyethylene (column 6 lines 7-8).

For reasons, discussed above, claim 11 is novel. Claims 12, 18 and 19, which all depend upon claim 11 are therefore novel as well.

Claim 15

The Examiner stated:

Regarding claim 15, Crisci discloses a surface-to-surface contact between the lower portion of the rim and the face of the ridge of the overcap (figure 4, 34A).

For reasons, discussed above, claim 11 is novel. Claim 15, which depends upon claim 11 is therefore novel as well.

CLAIM REJECTIONS – 35 U.S.C. § 103(a)

Claims 13 and 21

The Examiner has rejected claims 13 and 21 under 35 U.S.C. § 103(a) as being unpatentable over Crisci (U.S. Patent No. 4,209,107) in view of Freek et al. (U.S. Patent No. 6,047,851). In particular, the Examiner stated:

Crisci discloses all of the claimed information, yet fails to describe a blow molding technique. Freek et al. teach a container designed to be blow molded (column 1 lines 11-12, lines 20-24; column 3 lines 49-50b). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the container of Crisci with the blow molding technique of Freek et al. in order to facilitate a more efficient and faster way of making the containers while at the same time having reasonable control over manufacturing tolerances.

All limitations of the claimed invention must be considered when determining patentability. *In re Lowry*, 32 F.3d 1579, 1582, 32 U.S.P.Q.2d 1031, 1034 (Fed. Cir. 1994). A prima facie case of obviousness is established when the teachings of the prior art itself suggest the claimed subject matter to a person of ordinary skill in the art. *In re Bell*, 991 F.2d 781, 783, 26 U.S.P.Q.2d 1529, 1531 (Fed. Cir. 1993).

Because claim 11 has been amended to require the limitation of "a flattened face of said ridge being configured such that <u>only</u> said flattened face seats against said lower portion of said rim of said container," and because Crisci and Freek do not teach or suggest such limitation, applicants believe the rejection to be moot in light of the amendment. Consequently, applicants respectfully request the Examiner to withdraw the rejection as to claims 13 and 21.

Further, Crisci teaches a container/lid combination that has four separate surfaces in contact in a groove/rim configuration. (See e.g., Crisci, col. 2, lns. 13-15). If the blow molded container having a rim is larger or smaller than the corresponding groove in the lid, the cap will not fasten because the 4-contact points required by the Crisci disclosure requires a very tight tolerance because the contact points work against one another. (See, Crisci, col. 2, lns.5-15 stating "Because the width of the U-shaped groove is slightly smaller than the width of the upper portion of the container body, the groove clamps the inner wall of the container and the outer, upper edge surface of the ridge formed about the container. There is also a wedge-like edge on the groove which co-acts with a matching surface on the lower part of the ridge to jam the container body into contact with the bottom of the inverted U-shaped groove. This results in the

four surface contact seal and in securely locking together the container closure and the container body."). If the circumferential rim is too large or too small, it will be difficult to fit ("jam") the rim into the groove. Jamming the rim into the groove will prevent the flexible materials (e.g. lid groove and container rim) from forming a contact surface about the circumference of the lid/container interface, resulting in a non-air tight seal. In fact, Crisci recognizes the tolerances required and therefore indicates that the container is to be "injection molded." For example, Crisci explicitly states that "[t]he present invention container 10 is particularly adapted for manufacture by injection molding techniques." (Crisci, col. 3, lns 61-63). The combination of the container of Crisci with the blow molding technique of Freek et al. would fail to produce an air-tight seal for the 4-point contact lid of Crisci. "Rather than being made obvious by the reference, such modification would run counter to its teaching by rendering the apparatus inoperative." In re Schulpen, 55 C.C.P.A. 960, 390 F.2d 1009, 1013, 157 U.S.P.Q. (BNA) 52, 55 (CCPA 1968). Applicants would further point out that Crisci, by requiring a 4-point contact lid is basically admitting that their lid does not make a good seal by requiring a redundant system. The present invention, on the other hand, as demonstrated by the data provided in Figure 6 provides a very good seal. Consequently, applicants respectfully request the Examiner to withdraw the rejection as to claims 13 and 21.

Claims 14 and 22

The Examiner has rejected claims 14 and 22 under 35 U.S.C. § 103(a) as being unpatentable over Crisci (U.S. Patent No. 4,209,107) in view of King (U.S. Patent No. 4,691,501). In particular, the Examiner stated:

Crisci discloses all of the claimed information, yet fails to describe the cap being made through an injection molding process. King teaches an overcap designed to be injection molded with polyethylene (column 5 lines 62-63). Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the container of Crisci with the injection molding technique of King in order to have significant control of the dimensions of the overcap. This provides for the overcap to be manufactured very precisely with a low manufacturing tolerance.

Because claim 11 has been amended to require the limitation of "a flattened face of said ridge being configured such that only said flattened face seats against said lower portion of said rim of said container," and because Crisci and Freek do not teach or suggest such limitation,

applicants believe the rejection to be moot in light of the amendment. Further, Applicants would point out that the cap of Crisci, if injection molded, would require a negative draft angle to release the lid from the mold because of the location of the inwardly extending fourth contact surface 42 in relation to the closure 14 (see Fig. 2 of Crisci). Such negative draft would cause the contact surface 42 to engage the steel mold upon release which can drive up costs because of the need to run slower and colder so that the lid can be ejected from the mold with minimal damage to the contact surface 42. Running slower and colder slows production and drives up costs. Thus, the combination of Crisci and Freek as suggested by the Examiner would either result in slower production or a lid a higher error tolerance due to the contact surface 42 being damaged upon removal from the mold. Thus, even if the references could be properly combined, they would not result in the claimed invention. Consequently, applicants respectfully request the Examiner to withdraw the rejection as to claims 14 and 22.

Claims 16 and 17

The Examiner has rejected claims 16 and 17 under 35 U.S.C. § 103(a) as being unpatentable over Crisci (U.S. Patent No. 4,209,107). In particular, the Examiner stated:

In regard to claim 16, Crisci discloses the nominal inner diameter of the overcap at the peak equal to the nominal outer diameter of the rim of the container (figure 4, 62). However, Crisci does not disclose a relationship between the overcap and the container. However, it would have been obvious to claim a manufacturing tolerance for the components of the container for container sealing and tightening purposes so as to make the container air-tight when overcap is properly placed on container. It would have been obvious to one of ordinary skill in the art at the time of the invention, to have made the prior art at the claimed ranges, since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. In re Aller, 105 USPQ 233 (Refer to MPEP 2144.05).

In regard to claim 17, Crisci discloses the nominal inner diameter of the overcap at locations away from the peak to be greater than the nominal outer diameter of the rim of the container (figure 4, horizontal distance form 48 to 62). However, Crisci does not disclose a relationship between the overcap and the container. However, it would have been obvious to claim a manufacturing tolerance for the components of the container for container sealing and tightening purposes so as to make the container airtight when overcap is properly placed on container. It would have been obvious to one of ordinary skill in the art at the time of the invention, to have made the prior art at the claimed ranges, since it has been held that where the general conditions of a claim are disclosed in the prior art,

discovering the optimum or workable ranges involves only routine skill in the art. *In re Aller*, 105 USPQ 233 (Refer to MPEP 2144.05).

Because claim 11 has been amended to require the limitation of "a flattened face of said ridge being configured such that only said flattened face seats against said lower portion of said rim of said container," and because Crisci and Freek do not teach or suggest such limitation, applicants believe the rejection to be moot in light of the amendment. Consequently, applicants respectfully request the Examiner to withdraw the rejection as to claims 16 and 17.

Claim 20

The Examiner has rejected claim 20 under 35 U.S.C. § 103(a) as being unpatentable over Crisci (U.S. Patent No. 4,209,107). In particular, the Examiner stated:

Crisci discloses all of the claimed information as stated above, yet fails to describe how to determine tolerance, overlap, and nominal inner diameters of the cap. However, it would have been obvious to not only have claimed a manufacturing tolerance for the components of the container, but to have determined a nominal inner diameter of the overcap in several locations. Determining these dimensions is necessary for container sealing and tightening purposes so as to not only make the container air-tight, but also make it feasible to put on and remove the overcap. It would have been obvious to one of ordinary skill in the art at the time of the invention, to have made the prior art at the claimed ranges, since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. *In re Aller*, 105 USPQ 233 (Refer to MPEP 2144.05).

A reference may be said to "teach away" from the claimed invention when a person of ordinary skill, upon reading the reference, would be discouraged from following the path set out in the reference, or would be led in a direction divergent from the path that was taken by the applicant. *In re Gurley*, 27 F.3d 551, 553, 31 U.S.P.Q.2D 1130, 1131 (Fed. Cir. 1995). Crisci teaches a container/lid combination that has <u>four</u> separate surfaces in contact in a groove/rim configuration. (See e.g., Crisci, col. 2, lns. 13-15). Applicants would further point out that Crisci, by requiring a 4-point contact lid is basically admitting that their lid does not make a good seal by requiring a redundant system. The present invention, on the other hand, as demonstrated by the data provided in Figure 6 provides a very good seal. Further, the present invention teaches that, "[i]nterferences between the container and cap at points other than the intended flat surfaces can cause the closure to become point-to-point, rather than the desired surface-to-

surface, so other portions of the inside of the cap are designed to not touch the container, preventing interferences." (See 2005/0082304 at ¶11). Crisci requires a lid having a groove designed such that it requires four contact surfaces 34a, 34b, 34c, 34d and three rounded corners or void spaces 58, 60, 62. (Crisci, col. 63-67). To get such surface to surface contact, rather than point-to-point contact, the Crisci container must be manufactured to very tight (and more expensive) tolerances. As a result, Crisci teaches that its "container 10 is particularly adapted for manufacture by injection molding techniques." (Crisci, col.3, lns. 61-63). "this provides for approximately 3-5 mil clearance at each of these corners when the closure is sealed on the container body . . ." A 3-5 mil clearance corresponds to 0.003 to 0.005 inches. The presently claimed invention, on the other hand, can utilize a container having a tolerance TCNTR = 0.015 inches or 15 mils (see Table 1 of 2005/0082304), which provides "a well-fitting lid at low costs." (See 2005/0082304 at ¶31). Thus, it is the claimed geometrical shape that permits the greater error tolerances to be used to maintain a desired seal. Consequently, applicants respectfully request that the Examiner withdraw the rejection.

Claim 23

The Examiner has rejected claim 23 under 35 U.S.C. § 103(a) as being unpatentable over Crisci (U.S. Patent No. 4,209,107) in view of Craftech Industries. In particular, the Examiner stated:

Crisci discloses all of the information, as shown above, but fails to show polyethylene being a low-friction plastic. However, this information is well known in the art and can be seen through the published information by Craftech Industries, Inc. that polyethylene is indeed a low-friction material. (www.craftechind.com/material.htm, published March 1, 2000).

If an independent claim is nonobvious under 35 U.S.C. 103, then any claim depending therefrom is nonobvious. *In Re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988); MPEP 2143.03. Because claim 20 is non-obvious for reasons discussed above, claim 23 is necessarily non-obvious. Consequently, applicants respectfully request that the Examiner withdraw the rejection as to claim 20.

CONCLUSION

If there are any outstanding issues that the Examiner feels may be resolved by way of a telephone conference, the Examiner is cordially invited to contact Chad E. Walter at 972-367-2001.

The Commissioner is hereby authorized to charge any payments that may be due or credit any overpayments to CARSTENS & CAHOON, L.L.P. Deposit Account 50-0392.

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Respectfully submitted by:

Dated: 3-13-06

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